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AUTHOR Poplack, Shana; Pousada, Alicia
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ABSTRACT

This paper, part of a larger study of bilingualism, examines the assignment of gender to borrowed nouns, defined as those which can be etymologically identified as having entered Montreal French or Puerto Rican Spanish via English. The data were drawn from two distinct data bases. One consisted of over 300 hours of taped speech recorded from 16 Puerto Rican children and adults, residents of a single block in East Harlem, New York. The French data were extracted from a computerized corpus of sociolinguistic interviews with 120 speakers of Montreal French. The study focuses on the following: (1) motivations for the study of gender assignment; (2) review of factors cited in the literature as responsible for it; (3) an estimation of the influence of these factors on the attribution of one gender rather than the other to English nouns borrowed into Puerto Rican Spanish; and (4) an examination of intergenerational and interlinguistic patterns by way of a comparison of adult and child behavior, and a comparison of Puerto Rican patterns with Montreal French. The study shows that factors governing gender assignment are language-specific, and that once a gender is assigned by whatever criteria, there is generally unanimous agreement on its usage among speakers. (AMH)

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A COMPARATIVE STUDY OF GENDER ASSIGNMENT TO BORROWED NOUNS

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Language Policy Task Force

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A COMPARATIVE STUDY OF GENDER ASSIGNMENT TO BORROWED NOUNS[1]

Shana Poplack
Alicia Pousada
Centro de Estudios Puertorriqueños
City University of New York

1. Introduction

Detailed studies of morphophonological, syntactic and semantic developments in the Spanish spoken by Puerto Rican bilinguals in New York City (Poplack 1978, 1980a, 1980b; Pousada and Poplack 1979, Sankoff and Poplack 1980) show that they are internal, or systemic tendencies, and not due to influence from English. On the basis of those studies, we concluded that nearly a century of contact had not affected the Puerto Rican Spanish grammatical system, and that influence from English was probably largely confined to more superficial levels of linguistic structure.

In this paper we examine one area in which the contact situation has had a clear effect: the lexicon. In particular, we focus on one means available for speakers to incorporate foreign material into the host language: the assignment of gender to borrowed nouns. In what follows we will first discuss the motivations for the study of gender assignment, review the factors cited in the literature as responsible, and then estimate the effects of all of these factors combined in contributing to the attribution of one gender rather than the other to English nouns borrowed into Puerto Rican Spanish (PRS). We will then examine both intergenerational and inter-

linguistic patterns by 1) comparing adult behavior with that of their children, and 2) comparing Puerto Rican patterns with Montreal French (MF), a language which is typologically similar to Spanish, and which has coexisted with English even longer than Puerto Rican Spanish, although under rather different circumstances.

2. The Category of Gender

Languages may be divided typologically into those which have grammatical gender (e.g. Indo-European languages) and those which do not (e.g. Finno-Ugric, Chinese, Basque languages). Among gender languages, two-gender systems, distinguishing masculine and feminine, and three-gender systems, distinguishing masculine, feminine and neuter, are the most common, although developments in these classificatory systems vary widely from language to language. In the Romance languages, for example, the original three-gender system has been reduced to two; some Scandinavian dialects have gender systems which group masculine and feminine together against neuter, etc.

Grammatical gender is considered by most linguists to be a surface syntactic means for classifying nouns according to their suffix, the correlation between natural sex and gender being secondary and imperfect. (See Fodor 1959 and Ibrahim 1973 for discussion of the relevant literature.) In this, gender resembles nominal class systems such as those of the Bantu and other African languages, as concord or agreement are the most important criterion in both types of system. Gender as well as class languages have three basic word

classes: words with inherent gender or class (nouns), words with concordial gender (these will vary according to the language), and those with neither (invariable constituents). In both French and Spanish, determiners, most adjectives and pronouns must agree in gender with the head noun; participial verbs also show agreement under certain circumstances.[2] We refer in what follows to these elements as "gender carriers". In English, on the other hand, gender has lost its function as a grammatical category, and persists only in pronouns referring to animate beings or personified inanimate nouns. Given the differences between the languages under consideration, we will seek to establish how gender is assigned to nouns borrowed from a language in which gender is not a syntactic category.

We will also examine whether there is any weakening of this complex system of noun classification ascribable to the contact situation by comparing gender assignment among second and third generation speakers of Puerto Rican Spanish, the majority of whom were raised in the United States, with that of their parents. We will specifically seek to establish whether formal training in Spanish (i.e. participation in bilingual programs) to which about half the children are exposed, is a differentiating factor in children's behavior.

The category of grammatical gender has been characterized as "one of the unsolved puzzles of linguistic science" (Fodor 1959, Ibrahim 1973). Since at least the fifth century B.C., linguists have not been able to agree on whether the origins and functions of

gender are semantic or syntactic. Deciding this question is complicated by the fact that it is not clear whether any given noun has its specific gender by virtue of its synchronic phonological, syntactic and/or semantic properties, or simply because this gender was transmitted by previous generations of speakers of the language.

This explains in part the recent proliferation of studies of gender assignment to loanwords (e.g. Arndt 1970, Beardsmore 1971, Zamora 1975, Lang 1976, Barkin 1980), since examination of borrowed forms provides an ideal opportunity to investigate synchronically the factors operative in assigning gender to new material, which has not been handed down from previous generations.

Though we agree with Haugen (1969:441) that such studies cannot shed light on the origin of gender--indeed, there is little consensus in the literature on whether formal or semantic influences predominate, even in studies of the same language--they can tell us something about the present-day functioning of gender in these languages, and contribute to our knowledge of one aspect of the integration of borrowed material into a recipient language.

3. Previous Studies of Gender Assignment

The factors cited in the literature as responsible for gender assignment in borrowed nouns (e.g. Haden and Joliat 1940, Reed 1942, Weinreich 1953, Haugen 1969, Ibrahim 1973) include a) the physiological sex of the (animate) referent, b) identification of the phonological shape of the loanword with a class of shapes in the host language requiring a certain gender (e.g. most Spanish words

ending in *-r* take masculine, French words ending in *-ie* take feminine), c) association with a host language semantic equivalent and ascription to the borrowed word of the gender of that equivalent (PRS *el book* < *el libro*; MF *la cookerie* < *la cuisine*) to which we refer as "analogical" gender, d) association with the gender of a host language homophone (e.g. Eng. *color* ∿ Sp. *color*; Eng. *party* ∿ Fr. *parti*), e) association of a borrowed suffix with a host suffix requiring a certain gender (Eng. *-y* with Sp. *-ía*, Fr. *-ie*; Eng. *-ment* with Sp. *-miento*, Fr. *-ment*).

Also noted anecdotally (Arndt 1970) is the factor of graphemic image of a loanword. Although this factor may have some import in French, since borrowed words retaining English spellings in the dictionary appear (at least from the data presented in Tucker et al. 1977) to favor masculine gender, it is questionable whether it affects Puerto Rican Spanish, a language in which only a small proportion of borrowed words are old (or accepted) enough to appear in print at all, let alone in the dictionary.[3]

Even in the French case it is by no means clear whether the written form of a given word determines its pronunciation and hence, its gender (what Haden and Joliat (1940:80) call "learned borrowings"), or whether the spelling is made to conform with a previously assigned pronunciation and/or gender. Indeed, the provenance of well-established borrowings in Montreal French--whether via Metropolitan French and hence probably through written sources, or through independent developments--is often problematic.

Since, moreover, our data were not elicited through written

questionnaires, but were extracted from naturally occurring speech, we omitted the graphemic factor from our calculations.

A final factor is the tendency (cited by Haugen 1969, Correa-Zoli 1973), to which we return below, for loanwords to take on the so-called "unmarked" gender of the host language, presumably masculine in French and Spanish.

The aforementioned studies have basically attempted to isolate the single factor responsible for gender assignment and to explain away the exceptions in terms of other factors. Haugen says of Norwegian that the general rule is that "all nouns become masculine unless they are associated with a homophonous feminine or neuter morpheme or a female creature" (1969:448). Aside from the somewhat *ad hoc* nature of such a "rule", these studies often lead to conflicting results. Thus, in describing gender assignment to English loanwords in German, Lang (1976) tells us that the basis is semantic, Arndt (1970) claims that it is graphemic and morphological, and an earlier study by Reed (1942) cites analogical, suffixal, and physiological criteria as well as association of English *the* with the German feminine determiner *die*.

Correa-Zoli (1973) tells us that the general trend in gender assignment in Italian is masculine, the exceptions to which can be explained by the pull of phonological shape and placement within a semantic class. In a psycholinguistic study, Ervin Tripp (1973) found that even in nonsense words, gender had semantic connotations for Italian-English bilinguals.

The problem with the studies which claim predominance of a

single factor is the embarrassment of exceptions to be accounted for, while those which admit more than one factor fail to examine every loanword systematically to see if they could have been at play simultaneously. Thus, in accounting for feminine "deviations" from the masculine Italian "norm", Correa-Zoli explains away *la norsa* 'nurse' as being due to association with natural gender, *la pinta* 'paint' by its placement within a semantic class, and *la suera* 'sweater' as a result of phonic adaptation (1973:125-126). From the shape of these words, however, it is plain that the last-mentioned factor could well account for all of these cases.

How do these investigators know which factor takes precedence when more than one is present?

Two other studies deserving of mention are those of Beardsmore (1971) on Flemish loanwords in Brussels French and Barkin (1980) on English loanwords in Chicano Spanish. In contrast with the rest of the literature, which has generally reported an overwhelming inter-speaker regularity in the assignment of gender, even if there was not much agreement on the factors motivating gender choice, Beardsmore suggests that speakers who do not keep their two languages separate will show deviant gender assignment patterns compared with the rest of the community (p. 142).[4] Barkin takes this tack further by correlating the quantity of unassimilated loanwords with the complete absence of gender indications on borrowed nouns in Chicano Spanish. She claims that for those informants who chose more phonologically assimilated loanwords and/or few English borrowings, gender remained an important grammatical category. However,

for those who used unassimilated items from English, gender played little or no role (p. 5).

We must point out that since gender does not exist on its own, but is manifested morphologically in certain sentence elements, this sort of finding, viz. that degree of phonological integration of a word correlates with the presence or absence of the category of gender, seems highly unlikely, unless the speakers belong to some speech community where determiners, pronouns and adjectives, the gender carriers, are not used in Spanish. Rather we assume that her results are due both to her elicitation technique, which consisted of asking a respondent to identify a picture (to which a common response is simply, e.g. "*dog*"), and to the fact, to be discussed in section (5.3.2), that gender is not always required or shown.

To verify these impressions, and as part of our ongoing studies of the types of influence one language may exercise on another, we also examined the presence of gender in terms of syntactic requirements for its expression.

4. Variation Theory and Borrowings

The variationist approach contributes two new aspects to the study of borrowings in general and to the study of their gender assignment in particular.

The data bases for most previous work have been set up through elicitation or translation procedures, or through the collection of examples from various sources: written, or spoken and overheard by the linguist. The present study uses instead two large corpora of

the spoken language, which enables us to situate borrowed nouns in their natural context.

The second aspect of the variationist approach is to treat gender assignment as a variable process. This needs some justification, for as we will confirm later, with few exceptions, the gender of loanwords is not variable. However, at the time the word is being borrowed, the various factors which influence the choice of gender impinge on this choice in a way analogous to the way environmental factors affect a linguistic variable in discourse. Proof of this claim, that the choice of gender is attributable to a combination of quantitative influences from various factors, and that these influences only determine the probability that the choice be masculine or feminine, is a major goal of this paper.

This differs from the traditional explanatory paradigm whereby all loanwords having a certain characteristic, say, will be masculine and the rest feminine, except when certain features are present, when the choice will be reversed, except for certain exceptions to these exceptions, and so on. We suggest that this latter deterministic approach to explaining gender assignment represents an invalid use of hindsight to incorrectly avoid the element of unpredictability inherent in the assignment process.

Our point of view is perhaps best enunciated by Haugen, although, presumably for lack of a suitable analytical framework, he himself had recourse to the deterministic fallacy cited above:

> Where several factors have operated, we have no good way of saying which one was the most important. We cannot rule out the possibility of

> coincidence unless we have a large number of instances and as few exceptions as possible. At best we are dealing with probabilities.
>
> The explanations advanced so far have not made it possible to set up rules by which one could predict the gender of every noun. Most students have had a residue of forms which seemed to defy every rule, and one is tempted to say with C.B. Wilson that chance has been a considerable factor (1969:441).

5. Data and Methods

5.1 Data

The data on which this study is based are drawn from two rather distinct data bases. One consists of over 300 hours of taped speech recorded from 16 Puerto Rican working-class children and their parents and elders, all residents of a single block in East Harlem, New York. These data were recorded during several years of participant observation in a wide variety of situations and settings, characterized by speech ranging from highly formal to "vernacular" styles.[5] The composition of the sample is described in detail elsewhere (Language Policy Task Force 1980, Poplack and Pousada forthcoming). Suffice it to say here that both adults and children include fluent and non-fluent bilinguals; the children were additionally selected according to whether their language of instruction in school was Spanish or English, in order to investigate whether those who receive formal training in Spanish show different patterns of gender assignment from those who acquired Spanish outside of school.

The French data were extracted from a computerized corpus of sociolinguistic interviews with a socially stratified, randomly

selected sample of 120 speakers of Montreal French (Sankoff and Sankoff 1973, Sankoff et al. 1976, 1978; Sankoff 1978).[6] Thus, in contrast to other studies of gender assignment to loanwords cited above, the data used here were neither specifically elicited nor collected from written texts; all instances of borrowed nouns occurred spontaneously in speech collected for other purposes.

The dissimilarities between the samples in social and stylistic representativeness, as well as the differences in the status of francophones in Montreal and Puerto Ricans in New York City are evident.[7] These differences could prove crucial in the study of the propensity to use loanwords versus native words, of situational determinants of loanword use, of rate of occurrence of loanwords, of preferred semantic fields for loanwords, etc. However, rather than approach any of these issues, this study will be limited to the examination of only one aspect of the incorporation into the host language of borrowed nouns once they are used: their assignment to a gender. In this sense the two data bases are comparable: with few exceptions (section (5.3.2)), speakers of both Montreal French and Puerto Rican Spanish must assign gender to English nouns when producing them in a host language context.

Moreover, though inter-speaker vacillation in gender assignment has been ascribed to social factors (Arndt 1970, Beardsmore 1971), we will show that any differences in gender assignment which do emerge are language-specific, and not due to social or stylistic differences either between or within the samples.

5.2 "Borrowed" Nouns

For the purposes of this study we define as borrowed any single noun which can be etymologically identified as having entered the language via English. In an effort to separate potential instances of code-switching from borrowing, we excluded all cases in which two or more consecutive English words were involved. Thus examples like (1) were excluded from this study:

1a. MF: C'est *push button business*, puis le cerveau n'est pas développé. (97/308)[8] 'It's push-button business [automated], and you don't get to use your brain.'

1b. PRS: Te cogieron ahí en el *white door*. (3/403) 'They got you there at the white door.'

Compounds, which can be argued to represent a single unit in the mind of the speaker, were included:

2a. MF: Elle sait pas encore ce que c'est qu'un *miracle mart*. (96/461) 'She still doesn't know what a miracle mart is.'

2b. PRS: Vamos pa' arriba a meter mano a la *tape recorder*. (5/213) 'Let's go upstairs and fool around with the tape recorder.'

Aside from this distinction, borrowed nouns were treated regardless of degree of social or other integration into the community repertoire. We thus considered very old and well-accepted terms like *sandwich*, *snob* (which came into Metropolitan French in 1801 and 1857 respectively),[9] along with others which are comparatively recent (e.g. MF *les speedés* 'speed freaks', PRS *los sergio* 'jeans').[10] We included words which are completely integrated phonologically (Fr. *budget* [byd'ʒe], PRS *mattress* ['matre]) and/or morphologically (MF *le stoppage* 'act of stopping', PRS *la estofa* 'stuff') as well as those

which were not. Some words, like *club*, *gang*, *job*, appeared over 100 times each in the Montreal French corpus.[11] Others, such as MF *boardwalk*, *pee-wee*, PRS *two-timer*, *footprint*, were only uttered once by a single speaker. In fact, it is an empirical question whether the latter should be considered instances of single-word code-switching rather than borrowing; in the absence of further information they were included in this study.

All of these cases, different in degree, though perhaps not in substance, reflect the diversity inherent in bilingual speech performance. A full study of loanwords would need to distinguish among them;[12] however, regardless of their degree of acceptance or integration in the community, each of these nouns must be assigned a gender when uttered in a French or Spanish context. It is the factors involved in the assignment process which are the focus of study here.

5.3 Coding Procedures

Every borrowed noun in the two corpora thus identified was coded as to the gender of its animate referent, its analogical translate, its host language homophone, and analogy with its suffixal ending, if any of these were pertinent, and as Ø if they were not, as exemplified in Table 1. Thus the occurrence of PRS *shorty* and MF *boy friend* in the respective corpora were coded as M for physiological referent, since they both referred to males; *blackout* and *necking* were coded as Ø, as they have no animate referent, etc.

FACTOR	SPANISH EXAMPLE	FRENCH EXAMPLE		CODE
Physiological sex of (animate) referent:	*shorty*	*boy friend*		M
	cousin	*tomboy*		F
	blackout	*necking*		Ø
Phonological gender:	*suéter* 'sweater'	*appointement*	(integrated)	M
	pencil		(unintegrated)	M
	suera 'sweater'	*bobépines*	(integrated)	F
	orchestra		(unintegrated)	F
	rai 'ride'	*chum*	(integrated)	Ø
	flowerseeds		(unintegrated)	Ø
Analogical gender:	*building* (<el edificio)	*spring* (<le ressort)		M
	butterfly (<la mariposa)	*déliverie* (<la livraison)		F
	afro	*boogie*		Ø
Homophony:	*color* (<el color)	*establishment* (<l'établissement, m.)		M
	jacket (<la chaqueta)	*nation* (<la nation)		F
	coat	*sportswear*		Ø
Suffixal Analogy:	*language* (<el --aje)	*stoppage* (<le --age)		M
	education (<la --ión)	*bakery* (<la --ie)		F
	overtime	*stock*		Ø

Table 1. Factors conditioning gender assignment.

In addition, each borrowed noun was coded according to whether its phonological shape corresponded to any phonologically-based rules for gender assignment in the host language.

5.3.1 Phonological Rules for Gender Assignment in Spanish and French

The prescriptive phonological rules for gender assignment

to Spanish nouns are rather straightforward.[13] Aside from a few well-defined exceptions, words ending in unstressed *-a*, in *-d*, *-z* and in a number of suffixes (*-dad*, *-tad*, *-tud*, *-umbre*, *-ie*, *-iõn*) require feminine gender; compounds and those ending in the other vowels, consonants and suffixes are assigned masculine (Bull 1965, Holt and Dueber 1973, Socarras 1975, Alcina Franch 1975). On the basis of these rules, a word like *suẽter* 'sweater' would be coded as phonologically masculine; *suera* 'sweater', as phonologically feminine.

Prescriptive rules for gender assignment in French, in contrast, are of little help in determining gender. The grammar of the Académie française (1932:18), for example, gives the following information:

> Il y a deux genres: le masculin (père, loup); le féminin (mère, louve). 'There are two genders: the masculine (father, wolf); the feminine (mother, she-wolf).'

An elementary grammar for French children (Galichet and Mondouand 1963, cited in Tucker et al. 1977:14) gives the hint:

> Pour savoir si un nom commun est au masculin, essayez de mettre devant lui *le* ou *un*. 'To find out whether a common noun is masculine, try to put *le* or *un* [masculine determiners] before it.'

The vagueness of these rules is due to the fact that phonological shape only minimally determines gender assignment to French nouns. In their monumental investigation of gender assignment to over 31,000 nouns in the Petit Larousse dictionary, Tucker and associates (1977) found that noun ending and grammatical gender did occur

in a systematic and predictive fashion (p. 58). By this they mean that it is possible to predict and prove that rare or invented nouns ending in certain groups of phones (e.g. *-ation*) will be assigned feminine by native speakers, and others (e.g. *-isme*) will be assigned masculine. For still others--the majority--they predict that native speakers will not assign gender consistently. (This is the case for words ending in *-oire*, for example. About half of the words with this ending in the French dictionary are feminine, the others are masculine. Little surprise, then, that native speakers vacillate in assigning gender to uncommon French nouns with this shape.)

In coding for phonological gender of nouns borrowed into French, then, we systematically compared their word endings with every ending listed in the Tucker et al. compilation.[14] Only when an ending exhibited a strong preference for a certain gender (in the area of at least 10 to 1) did we code it as belonging phonologically to that gender (e.g. as 1,268 out of 1,277 words ending in *-age* are masculine in French, a word like MF *choppage* would have been coded as phonologically masculine). When a particular ending in English could be associated with many French endings (e.g. Eng. *-ck* with Fr. *-c*, *-que*, *-ques*, *-cque*), we did not associate it with any, unless 1) all took the same gender or 2) one ending was far more common than the others.

For the Puerto Rican Spanish data we further coded each English noun for degree of phonological integration into Spanish (e.g. *tena* ['tena] 'tenant' was coded as fully integrated; *book* ['buk], as unintegrated). This was not possible for the French data, which were

extracted from the written concordance to the corpus rather than the actual tapes.

5.3.2 Syntactic Requirements for the Expression of Gender

We also coded for each borrowed noun the actual gender assigned. As we will see below, many nouns could not be so coded. Since gender is a concord rule, its indications may be conveyed on determiners, adjectives or pronouns, as well as on past participles. As these are not always obligatory categories, and as gender distinctions are neutralized on some (e.g. French plurals, Spanish possessive adjectives), there are many cases of borrowed nouns which did not show gender.

In this connection, we examined for each borrowed noun whether or not a gender carrier was syntactically required. For example, instances where the gender carrier is not required in French included nouns following certain prepositions, as in (3), and after the copula, as in (4).

3. Et puis, les français, eux-autres, ils se bercent en ø *rocking chair* puis e...bien, nous-autres, on "watche" puis on watche en anglais, nous-autres. (92/362) 'Well, the French [it's okay if] they rock in a rocking chair, but us, if we [say] "watche", we're watching in English.'

4. J'ai un de mes *chums*, moi, qui est ø *boss*, c'est lui qui a le plus gros titre de la compagnie. (95/962) 'I've got a friend who's a boss, he's the one with the highest rank in the company.'

In nouns beginning with a vowel (5), after *notre*, *votre* (6), and in plural determiners (4), the gender distinction can be neutralized.

5. Moi, je parlerais jamais mal contre l'*establishment*, parce que moi, j'en travaille pour du monde qui sont dans l'*establishment*. (114/736) 'I would never say anything against the establishment because I work for people who are in the establishment.'

6. Il fallait faire notre Ø *stop*. (71/85) 'We had to make our stop.'

Similarly, in Spanish gender carriers are not required with mass nouns (7), plural nouns following verbs (8) or prepositions (9); gender distinctions are neutralized in unstressed possessives (9), etc.

7. Hasta Ø *overtime* me dió. (01/3) 'He even gave me overtime.'

8. Esos son Ø *ups*. (40/61) 'Those are ups [uppers].'

9. Le quitaron sus Ø *estripes* y todo, y le pusieron en Ø *plainclothes* a trabajar. (49/41) 'They took away his stripes and everything and put him to work in plainclothes.'

On the basis of these coding procedures, we examined 1,049 borrowed nouns in the French and Spanish corpora, to which 765 were assigned a gender. We first investigated whether the assignment of gender to borrowed nouns proceeds according to monolingual rules.

6. The Expression of Gender According to Syntactic Requirements

Table 2 depicts the proportion of gender expressed in Puerto Rican Spanish and Montreal French according to syntactic requirements for its expression in the respective languages.

	Puerto Rican Spanish		Montreal French
	Children	Adults	
Gender Required	99% 172/173	99% 282/284	98% 276/283
Gender not Required	4% 1/24	9% 11/118	10% 15/146

Table 2. Percentage of gender expressed according to syntactic requirement.

We note first that gender may be expressed, even when the determiner is not required or is uninflected for gender, via other sentence elements which are also gender carriers, as is the case in (10) and (11):

10a. PRS: Yo creo que mi *hair* está linda, beautiful. (02/334) 'I think my hair is pretty, beautiful.'

10b. Yo tengo *habits* más caros que smoking. (5/191) 'I have more expensive habits than smoking.'

11a. MF: Tes *hot dogs* sont pas prêtes, la steam, elle vient pas. (78/326) 'Your hot dogs aren't ready, the steam isn't coming.'

11b. Je vous dis, l'*overtime*, *elle* se fait rare en désespoir. (6/374) 'I'm telling you, overtime is getting terribly scarce.'

However, when the expression of gender, or more accurately, expression of the gender carrier, is required in the host language, it is almost categorically expressed. This is true of speakers of both Puerto Rican Spanish and Montreal French, regardless of the socio-economic, educational, age-based and other distinctions among

them. The Puerto Rican Spanish data, which include borrowed nouns which are both phonologically integrated and unintegrated, confirm that the expression of gender does not depend on phonological shape of the borrowed noun, as Barkin (1980) claims, but on the syntactic rules of the host language. Even more striking is the finding that the Puerto Rican children, some of whom have not yet finished the acquisition process, and who vary widely as to their bilingual ability, do not differ significantly from each other or from their parents in this regard. Table 2 shows that the complex system of noun classification which is gender is internalized by children as early as age 5, and this regardless of their formal training in Spanish.

Having ascertained that the usage of gender *per se* proceeds with borrowed nouns as in native ones, we turn next to the factors which determine the choice of masculine versus feminine gender for a given noun.

7. The Roles of Individual Factors in Gender Assignment

Table 3 presents the proportion of feminine gender assigned by the three samples to borrowed nouns according to the conditioning factors described in section 4.

		Puerto Rican Spanish		Puerto Rican Adults		Puerto Rican Children		Montreal French	
		F/N	%	F/N	%	F/N	%	F/N	%
Physiological gender:	M	0/29	0	0/13	0	0/16	0	0/14	0
	F	15/17	88	10/11	91	5/6	83	3/3	100
	Ø	46/428	11	21/269	8	25/159	16	60/274	22
Phonological gender:	M (int.)	8/130	6	8/94	8	0/36	0	5/52	10
	M (un.)	24/183	13	14/119	12	10/64	16		
	F (int.)	10/12	83	3/5	60	7/7	100	6/17	35
	F (un.)	1/3	33	1/2	50	0/1	0		
	Ø (int.)	4/21	19	0/11	0	4/10	40	52/222	23
	Ø (un.)	14/125	11	5/62	8	9/63	14		
Analogical gender:	M	7/242	3	3/142	2	4/100	4	20/107	19
	F	46/158	29	24/92	26	22/66	33	29/65	45
	Ø	8/74	11	4/59	7	4/15	27	14/119	12
Homophony:	M	0/38	0	0/29	0	0/9	0	0/3	0
	F	7/22	32	5/16	31	2/6	33	1/3	33
	Ø	52/404	13	24/238	10	28/166	17	62/285	22
	either	2/10	20	2/10	20	0/0		0/0	
Suffixal analogy:	M	0/4	0	0/3	0	0/1	0	1/28	4
	F	1/9	11	1/8	13	0/1	0	4/5	80
	Ø	46/406	11	21/243	9	25/163	15	56/250	22
	TOTAL	61/474	13	31/293	11	30/181	17	63/291	22

Table 3. Proportion of feminine gender assigned to borrowed nouns according to conditioning factors.

7.1.1 Physiological Gender

Although only a relatively small proportion of borrowed nouns could be assigned physiological gender (less than 10% in the Puerto Rican corpus and less than 6% in the Montreal French corpus), Table 3 shows that in those cases where this factor is present, it

completely determines gender assignment to the noun, confirming the claims in the literature.[15] This was the case even when words had a definite phonological shape requiring the opposite gender (e.g. *el tena* 'the tenant', which by the prescriptive rules outlined in section (5.3.1) would require feminine, but which actually referred to a male). This confirms the relative rarity of epicene gender, whereby a noun is uninflectable, even when referring to beings of both sexes (e.g. Fr. *le docteur*, 'male or female doctor', Sp. *la foca* 'male or female seal', Fr. and Sp. *le/el bebé* 'male or female baby'), at least in languages like French and Spanish. It remains to be seen whether this holds in languages where physiological gender is less of a determinant than syntactic gender (e.g. Swedish, German, Greek).

7.1.2 Analogical Gender

According to the coding rules mentioned above, we could assign analogical gender to 84% of the borrowed nouns in the Spanish corpus but to only 60% of the words in the French corpus. This discrepancy may have two causes. The first is simply our lesser familiarity with Montreal French compared to Puerto Rican Spanish. The second is the apparently greater preponderance of borrowed words in current idiomatic expressions in the Montreal French corpus, to which we did not assign analogical gender when there was no obvious counterpart involving word-for-word translation, as in (12) and (13).

12. Ils faisaient deux, trois mois d'armée, apres ça ils sacraient leur camp sur le *loose*. (95/516)
'They did two, three months in the army, after that they got the hell out of there.'

13. Il y'en a pas d'ouvrage, el il faut avoir bien du *pushing*. (35/131) 'There's no work, and you've got to have a lot of pull.'

Though we have not yet investigated this rigorously, it may indicate differential borrowing behavior in the two cultures: the large majority (approximately 80%) of borrowings into Montreal French are items which are either low on a translatability scale (e.g. *mini-mart, pop shop, dinky toy*), international terms (e.g. *revolver, basketball*), or slang expressions (e.g. *necking, stuff, pep pill*), whereas in this Puerto Rican speech community many more of the borrowed nouns refer to easily translatable, every-day items (e.g. *matre* 'mattress', *toile* 'toilet', *book, glove*).

The effect of analogical gender on gender assignment is quite significant in both Montreal French and Puerto Rican Spanish, as may be seen in Table 4.

	Puerto Rican Spanish	Montreal French
Analogically:		
masculine	206/213 97% masc.	73/93 78% masc.
M, F, and Ø	382/428 89% masc.	211/274 77% masc.
feminine	110/141 78% masc.	36/62 58% masc.

Table 4. Effect of analogical gender on assignment of masculine gender when tokens determined by physiological gender are removed. (Abstracted from Table 3.)

Even after removing the tokens determined by the physiological gender of the referent, 97% of Puerto Rican Spanish analogically masculine nouns took masculine gender, as compared to only 78% of the analogically feminine nouns (where the average rate of masculine in the corpus is 87%). In Montreal French, 78% of analogically masculine nouns took masculine, as compared to 58% of analogically feminine nouns (overall rate of masculine = 77%). As we shall see later, this effect is independent of the phonological shape of the borrowed noun. We have thus isolated a clear semantic component to gender choice as distinct both from physiological and phonological influences. The noun is being assigned gender to some extent simply on the basis of its perceived semantic equivalence (or partial equivalence) to a word having that gender in the host language.

7.1.3 Phonological Shape

Largely as a consequence of the fact that the rules for French gender assignment on the basis of word-ending are generally much less well-defined than the Spanish rules, only about one-fourth (23%) of the nouns in the Montreal French corpus had an ending which might be expected to have a phonological effect on the gender assigned, compared to about 70% of the Spanish words. This is also partially due to the greater tendency of French to leave English borrowings phonologically unintegrated, aside from a levelling of syllabic stress. (Thus, a word like MF *bargain* can be pronounced [bárgə́n], with equal stress on both syllables. Since the last syllable does not occur in French, no phonology-based gender rule could be expected to apply.)

However, where phonologically-based gender assignment rules are clearly applicable, they have a strong effect in both Spanish and French. Despite the small number of borrowed nouns with feminine-type endings, as we go from strongly integrated nouns with masculine-type endings, to less integrated cases, to nouns without typically Spanish or French endings, to feminine-type endings, the proportion of feminine gender increases systematically, as may be seen in Table 5.

Ending:	Masculine integrated	Masculine unintegrated	Not Classified	Feminine unintegrated	Feminine integrated
Puerto Rican Spanish	8/130 6%	24/183 13%	18/146 12%	1/3 33%	10/12 83%
Montreal French	5/52 10%		52/222 23%	6/17 35%	

Table 5. Proportion of feminine gender assigned to English loanwords as a function of phonological shape of word ending. (From Table 3.)

This confirms that, contrary to Barkin's claims, phonological integration affects the choice of masculine or feminine rather than the use of the category of gender *per se*.

7.1.4 Suffixal Analogy and Homophony

Correspondences at either the suffixal level (especially in the French case, e.g. *company ∿ partie*), or involving the entire word (especially in the Spanish case, e.g. *question ∿ cuestión*),

appear to have some effect in causing the borrowed noun to take on the gender of its homophone or suffixal translate. These effects, however, involve largely the same words in which the phonological effect due to the word ending plays a role.

7.2 Independence of Factor Effects

The above statistical results for phonologically and analogically determined gender could have resulted from two types of configurations of data. If the phonological and analogical effects are independent, they may simultaneously play a role in gender determination, either contradictory, or in the same direction. However, if one factor, say the phonological, completely or strongly outweighs the other, i.e. the analogical, then the contexts in which the analogical factor is observed to have an effect must be those in which there is no contradictory phonological effect. Considering the effect of feminine analogical gender in the presence and absence of masculine phonological gender (Table 6) shows that the first hypothesis, that of independent effects, is the correct one.

Analogically feminine, Not phonologically masculine.	14/17	30% feminine
Analogically feminine, Phonologically masculine.	17/94	18% feminine
Analogically and phonologically masculine.	7/213	3% feminine

Table 6. Independent effects of analogy and phonology in determining gender assignment (tokens with physiological gender removed).

When no contradictory phonological effect is present, 30% of analogically feminine nouns take the feminine gender. When these nouns have masculine-type endings, only 18% have feminine gender. When the analogical effect and the word ending are masculine, the proportion of feminine gender falls further, to 3%. This shows that neither factor completely outweighs the other.[16]

The calculations in Tables 3-6 were performed excluding all nouns having a corresponding physiological gender. Because this factor has a virtually categorical effect, the other factors may only express their effects when physiological gender is absent.

The reliability of our quantitative results is confirmed through comparison of the two independent Spanish samples. Aside from statistical fluctuations due to small numbers for certain factors, the results from the child data closely parallel those of the adults (Tables 2 and 3). Again, it is the agreement between the two data sets, even on the subtle distribution of the different factors, which is most striking. Indeed, differentiation among the children

was so limited and idiosyncratic that it could not be ascribed to participation in bilingual programs or any other extra-linguistic factors. There is thus no evidence of weakening of gender assignment patterns among the younger generation.

8. The "Unmarked" Tendency

It has often been suggested that loanwords tend to adopt the unmarked gender of the language into which they are borrowed. At first glance, this explanation would seem to be apt for both our Spanish and French data, which show a predominance of masculine types: 87% (Spanish) and 78% (French).

The closer examination in Table 6, however, reveals that this principle may be of limited explanatory value, especially in the case of the Spanish data.

	SPANISH (TOKENS)[a]	SPANISH (TYPES)[b]	LOANS	CLASSIFIABLE ENDINGS	IDENTIFIABLE ANALOGY	FRENCH (TYPES)[c]	MONTREAL FRENCH (TOKENS)[d]	LOANS	CLASSI-FIABLE ENDINGS	IDENTI-FIABLE ANALOGY
F	45%	47%	13%	5%	39%	36%	44%	22%	25%	38%
M	55%	53%	87%	95%	61%	64%	56%	78%	75%	62%
TOTAL			474	328	400			291	69	172

Table 6. Gender assignment in host language nouns versus borrowed nouns.

[a] Data taken from Navarro Tomás 1968.

[b] Data taken from Bull 1965.

[c] Data taken from Tucker et al. 1977.

[d] Data taken from Sankoff 1978.

First, markedness appears to be most often associated in the literature on gender assignment with the relative frequency of the two genders (e.g. Haugen 1969). However, there is no overwhelming predominance of masculine nouns in either French or Spanish. Indeed, in running text, the ratio of masculine to feminine tokens is only about 55:45 in both languages (cf. Navarro 1968 for Spanish; Sankoff 1978 for Montreal French). In the French dictionary, according to Tucker et al. (1977), there is a higher proportion of masculine types, but it is not clear whether the addition of rare or unused nouns from the dictionary should be considered on the same footing with commonly used nouns in the assessment of markedness. (The argument for deciding markedness on the basis of gender assigned to rare or borrowed nouns would be circular in the present context.)

Second, in the Spanish corpus, many of the borrowed nouns end in consonants and few in *-a* (or other specifically feminine endings). This in itself could well account for most of the masculine/feminine disproportion in gender assignment. The remainder could easily be accounted for by the greater relative proportions of physiologically and analogically masculine forms in the corpus. These latter facts themselves need explanation--why should the proportion of analogically masculine borrowed nouns exceed the overall rate of masculine tokens in Spanish running text? Nonetheless, there is no clear evidence in these data that there is some underlying tendency independent of the shape and the meaning of the word for borrowed nouns to take on masculine gender. Indeed, when the other effects are factored out through the statistical analysis (Table 7), it will be seen

that there is a slight overall trend toward the favoring of *feminine* gender (corrected mean = .597), when all factors are held constant.

The French data show a different pattern. Even though the masculine/feminine gender assignment ratio is less here (78:22) than among nouns borrowed into Spanish (87:13), in French it cannot be explained in terms of disproportion of phonologically and analogically masculine borrowed nouns. Less than a quarter of the nouns could be defined as phonologically requiring a specific gender, and though more than half could be coded for analogical gender, the ratio of masculine to feminine codes is much less (62:38), than the actual disproportion in gender assignment. Furthermore, as we shall see, the statistical factoring out of the various effects on gender assignment (Table 9), leaves us with a distinct tendency to favor masculine over feminine (at .730), a tendency already noted by Haden and Joliat (1940).

What is particularly interesting here is that in the French of France, at least as exemplified by Tucker and associates (1977), and Haden and Joliat (1940), the assignment of gender to borrowed nouns, except those with feminine endings, is almost categorically masculine, whereas in the Montreal French corpus, a significant proportion is feminine. This is in line with a number of other impressions that Quebec French shows a greater predilection for assigning feminine gender to nouns than Metropolitan French. Various France/Quebec contrasts such as *le job/la job* or *le gang/la gang* are another line of evidence. Still another is the tendency documented by Barbaud (1979) for vowel-initial nouns, which are less distinctively

identified as to gender because of the contraction of the distinguishing vowel of the determiner, to take on a feminine gender.[17]

9. Multivariate Analysis of Contribution of Factors to Gender Assignment

The results of a variable rule analysis (Sankoff 1979) of the contribution to gender assignment of all of the factors discussed in section 8 combined, basically confirm the percentages in Table 3.

Corrected Mean: .597

PHYSIOLOGICAL GENDER		PHONOLOGICAL GENDER		ANALOGICAL GENDER	
M	0 [Knockout]	M int.	.13	M	.31
Ø	.15	M unint.	.26	Ø	.43
F	.85	Ø unint.	.27	F	.75
		Ø int.	.41		
		F unint.	.72		
		F int.	.97		

Table 8. Contribution of factors selected as significant to the assignment of feminine gender to borrowed nouns in Puerto Rican Spanish. Factors not selected: homophony, suffixal analogy. Factor effects vary between Ø and 1, with figures higher than .50 favoring rule application, and figures lower than .50 inhibiting rule application. The figure .50 itself has no effect on the rule.

Corrected Mean: .270

PHYSIOLOGICAL GENDER		ANALOGICAL GENDER		SUFFIXAL ANALOGY	
M	0 [Knockout]	Ø	.30	M	.12
F	1 [Knockout]	M	.48	Ø	.45
		F	.72	F	.90

Table 9. Contribution of factors selected as significant to the assignment of feminine gender to borrowed nouns in Montreal French. Factors not selected: homophony, phonological gender.

We see from Tables 8 and 9 that physiological gender is indeed an overriding factor in determining gender in both Puerto Rican Spanish and Montreal French. This is a knockout factor: no words with male referents were assigned feminine gender and vice-versa. The .85 contribution of female sex to the choice of feminine gender in Puerto Rican Spanish is due to the two exceptions mentioned in footnote 15. We must recall, however, that physiological gender only pertains to less than 10% of the words in both corpora. Analogical gender also has a rather large and pervasive effect, in the expected direction.

The major difference in the two corpora resides in the role of the phonological shape of the word, which contributes a strong effect to gender assignment in Puerto Rican Spanish, an effect which, as mentioned before, increases as a function of the phonological integration of the loanword. Thus, the form ['kwɔra] contributes more to choice of feminine gender than ['kwɔ˞dɾ] 'quarter'. This is precisely what we might have expected given the well-defined rules for gender assignment obtaining in monolingual Spanish. As gender

assignment in French, on the other hand, is in comparison only minimally determined by the phonological shape of the word, there is no reason to expect this factor to take on greater importance in assigning gender to borrowed material. Moreover, less than one fourth of the nouns borrowed into Montreal French resembled French words, whereas 70% of those borrowed into Puerto Rican Spanish were made to resemble Spanish forms. This partly explains why phonological shape was not identified by the analysis as a significant factor in gender assignment in Montreal French.

The rest of the reason is that suffixal analogy, where equivalence can be established, *was* selected as significant by the statistical analysis. This factor is largely correlated with phonological shape, and thus, when one is selected, it precludes the other. Had phonological shape been selected, it would have had a similar but smaller effect than in Spanish.

Homophony, which does not pertain to more than 11% of the cases in either corpus, was not a significant factor in either language.

These results only partially confirm the conclusions of previous studies of gender assignment to borrowed nouns in these languages: Zamora (1975) found that physiological and phonological gender predominated in Puerto Rican Spanish, while Haden and Joliat (1940) cited as operative in Canadian French all the factors we have mentioned here, though none of these authors considered that more than one factor could have been operating simultaneously.

10. Discussion

We have examined all of the factors cited in the literature as important in gender assignment. In contrast with the prevalent approach, i.e. the explanation of gender assignment in terms of one categorical factor (e.g. physiological gender), and the successive explanation of all the exceptions by invoking a series of other categorical factors, we have treated all the factors simultaneously, since presumably all are at play at the time of introduction of a given borrowing, particularly in cases of conflict. We have shown that some of the factors cited in the literature do indeed contribute strong effects to gender assignment, while others, like homophony and suffixal analogy, are negligible, except possibly in certain closely-related pairs of languages. But in no case but the most straightforward one, that of physiological referent, do they approach being categorical. Indeed, by comparing Puerto Rican Spanish and Montreal French we have shown that the factors governing gender assignment are language-specific: they follow from the particularities of the host language. Thus we saw that phonological shape is more important in determining the gender of borrowed nouns in Puerto Rican Spanish than in Montreal French, reflecting monolingual patterns.

However, none of the linguistic factors mentioned, except in the relatively rare case of physiological referent, completely determines gender assignment beyond the proportions mentioned--this process is variable. But there is one other crucial factor which we have not yet discussed: the speech community. Once a borrowed noun

is assigned a gender by *whatever* criteria, there is generally unanimous agreement among speakers.[18] Thus we hear *le job, le gang, une interview* in Paris, but *la job, la gang, un interview* in Montreal; *la hamburguesa* in Madrid, *el hambérguer* in New York. Disagreement among speakers about recurring nouns, aside from physiologically determined ones (e.g. MF *le/la chum, le/la snob*, PRS *el shorty/la shorta*) did not exceed 4% for either data set.

This brings us to several other points illustrated by these findings. As mentioned above, Beardsmore (1971) has suggested, though not shown, that "some bilingual speakers [presumably those who are less acculturated] may show indifference as to what gender they opt for, others will show variations due to an incomplete assimilation of lexical items, and still others will show variations because of more subtle factors like a systematisation based on criteria holding good for one or the other or both of the languages in contact" (p. 142). By including in our study speakers of varying bilingual abilities--from functional monolinguals in the host language to balanced bilinguals, and from five-year-olds who have not yet completed the acquisition process in either language, to adults--we have demonstrated that such "variations" are practically non-existent among both Montreal French and Puerto Rican Spanish speakers. The few cases of vacillation among recurring nouns were rarely on well-established borrowings. This indicates the strong role of the speech community in establishing norms for bilingual as well as monolingual linguistic behavior. This factor outweighs that of bilingual ability, since non-fluent bilinguals are not significantly distinct from

balanced bilinguals, and that of educational attainment, despite Arndt's claims that the study of less-educated informants would have resulted in more randomly made and unexplained gender decisions (1970:249). In fact, according to the findings in this study, criteria for gender assignment decisions have been largely internalized by children by the time they reach the first grade, and do not differ significantly thereafter, regardless of formal instruction in Spanish.

Indeed, we have demonstrated an overwhelming regularity in gender assignment among all members of both samples by showing that well-defined criteria applying to native nouns also apply rigorously to borrowed material: words of English origin take on specific native grammatical functions. In virtually every case where the host language syntax requires the presence of a gender carrier, the borrowed noun is so accompanied, whether integrated into host language phonological and morphological patterns or not. Where assignment criteria depending on phonological segment are operative, these apply consistently, even for words which show two alternative paths of phonological integration (e.g. PRS *el suéter ∿ la suera* 'sweater'; *el hambérguer ∿ la hamberga* 'hamburger').

Thus it is clear that nouns borrowed from English, rather than disrupting the host inflectional and gender systems, are subject to the same processes and constraints as the rest of the lexicon.

Notes

[1] The work reported in this paper is part of the project "Intergenerational Perspectives on Bilingualism: From Community to Classroom" supported by the National Institute of Education under NIE-G-78-0091 and the Ford Foundation. We are especially grateful to David Sankoff for facilitating access to the Montreal French corpus and for his help with all phases of this research. Thanks also to Suzanne Laberge, Pascale Rousseau and Pierrette Thibault for tirelessly responding to our questions. This paper has benefited greatly from comments and criticism of Jorge Guitart, Juan Zamora and Pedro Pedraza.

[2] The past participle of French verbs conjugated with *être* agrees in gender with the subject of the verb; when conjugated with *avoir* it agrees with the preceding direct object. The past participle of reflexive verbs agrees with the subject unelss a preceding direct object is present, in which case it agrees with the latter. In Spanish, past participles in passive constructions with *ser* agree in gender with the subject of the verb.

[3] Those borrowed words which do appear in community publications such as posters, flyers, pamphlets and local newspapers, are almost without exception forms which have been socially integrated into the community repertoire, and hence most likely to be phonologically and morphologically integrated into Spanish patterns (Poplack, Sankoff and Pousada 1980). As we will see below, such linguistically integrated forms tend to take on the gender of native words of the same shape.

[4] The large percentage of gender vacillation (14%) reported in Haugen (1969) is undoubtedly due to the inclusion of several speech communities in the sample, a phenomenon analogous to what we describe in section 10 for Metropolitan and Montreal French.

[5] We designate as "vernacular" speech recorded in the absence of the interviewer.

[6] Because the French data were extracted from a computerized concordance of one million words rather than from the tape-recorded data, the context did not always allow us to distinguish whether synonymous nouns which are orthographically the same in French and English (e.g. *cone*, *drainage*) were borrowed or not. All instances such as these were therefore excluded from the analysis.

[7] The most obvious ones being, of course, that French Canadians constitute an overwhelming majority in the province of Quebec, with

representation in all social and economic sectors, and that French is the official language of that province. Puerto Ricans in New York, in contrast, are concentrated in the lower socio-economic sectors, and Spanish remains a minority language wherever it is spoken in the United States, regardless of the proportion its speakers represent in any given location.

[8] Numbers in parentheses are speaker identification codes.

[9] These may very well have been borrowed independently into Montreal French.

[10] Sergio Valente brand blue jeans.

[11] In these cases we counted types, not tokens, so as not to skew the data towards one gender through inclusion of a few frequently recurring types. However, any occurrence of a word which could be coded differently from other occurrences for any of the factors described in section 3, including actual gender assigned, was coded as a separate type.

[12] In fact, gender assignment is only one of many ways of distinguishing loanwords from momentarily borrowed material (see Poplack, Sankoff and Pousada 1980).

[13] We use the term 'rule' here in the sense of generalizations from actual frequency. In fact, the overwhelming majority of these rules accurately predict the gender assignment to 95% or more of the Spanish nouns in the dictionary subsumed under each (Bull 1965: 109). As we will see below, these same rules are also used to predict gender assignment to borrowed nouns.

[14] We follow the indications in Tucker et al. (1977) that beginnings of words provide no information concerning gender and are apparently not used as gender clues by native speakers of French.

[15] The figure of 88% assignment of feminine gender to nouns with physiologically female referents in the Puerto Rican data base is due to two exceptions: *el cow*, which may not have been seen by the child who uttered it as referring to a female being, and *el lesbian*, which is phonologically masculine.

[16] We could not study the opposite effect because there was only one noun with a feminine ending and masculine analogy (*el tena*).

[17] It is unclear how this tendency affects borrowed nouns. Only 18 nouns in our corpus began with a vowel, of which two were assigned feminine gender.

[18] Some instances of vacillation in gender assignment to native words have been noted by Poplack (1979) among Puerto Rican speakers in Philadelphia, and by Tucker et al. (1977) and Barbaud (1979) among French speakers in Canada. We have also noted additional examples of such vacillation in the speech of the East Harlem children and adults who constitute the present sample. Although there is no indication of the frequency of vacillation among native French nouns, we can roughly estimate (for the combined Philadelphia and East Harlem Spanish corpora) such vacillations to represent at most .1% of all gender assignments to native nouns.

In part because of the paucity of examples, examination of these data has not yet revealed any clear-cut patterning explicable in terms of physiological referent, phonological shape or distance of the gender carrier from the noun. We can point out, however, that approximately 20% of the vacillations in gender assignments to native Spanish nouns occur when the phonological shape of the word would require the opposite gender from the one it actually takes in standard Spanish (e.g. *el problema* 'the problem'). We also note that 66% of the vacillations went in the direction of masculine assignment to feminine nouns, a much lesser proportion than that noted for the assignment of masculine to borrowed nouns, and relatively closer to the rate of masculine nouns in running text. These remarks tie in with our observations (section 8) concerning the nature of the unmarked tendency in gender assignment.

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